



LCR-821 (12Hz~200kHz)
LCR-819/829 (12Hz~100kHz)
LCR-817/827 (12Hz~10kHz)
LCR-816/826(100Hz~2kHz)



FEATURES

- * Test Frequency:
 - 12Hz~200kHz (LCR-821)
 - 12Hz~100kHz (LCR-819/829)
 - 12Hz~10kHz (LCR-817/827)
 - 100Hz~2kHz (LCR-816/826)
- * 0.05~0.1% Measurement Accuracy
- * 100 Sets Memory for Save/Recall of Setup State
- * R/Q, C/D, C/R, L/Q Test Modes for all Models; Z/θ, L/R for LCR-821 Only
- * Absolute Value, Δ Value, and Δ % Measurement Display
- * 240 x 128 dot Matrix LCD Display
- * Test Condition and Test Result Shown on the Screen Simultaneously
- * Interface : RS-232C , Handler

The LCR-800 Series is a high-class digital LCR meter for component/material measurements, applicable to various R&D activities and production lines. A large 240x128 dot Matrix LCD display gives room for two measurement items plus setup parameters, and lets users get the whole picture in an instant. Measurement result is always accompanied with supplement factor as in R/Q, C/D, C/R, and L/Q. The LCR-821 also contains more accurate resistance measurement as a combination of absolute value and phase angle. 100 sets of measurement setup memory allow sharing LCR-800 series among multiple testing conditions or sites. For a better viewing experience with standard PC monitor, Windows based proprietary software is accessible via RS-232C terminal. The handler interface is standard for LCR-826/827/829 models.

| SPECIFICATIONS | |
|--------------------------------|---|
| TEST FREQUENCY | |
| | 12Hz ~ 200kHz (504 steps) for LCR-821 12Hz ~ 100kHz(503 steps) for LCR-819/829 12Hz ~ 10kHz(489 steps) for LCR-817/827 100Hz ~2kHz (245 steps) for LCR-816/826 |
| BASIC ACCURACY | |
| | 0.05% for basic accuracy for LCR-821/819/817 0.1% for basic accuracy for LCR-829/827/826/816 |
| TEST SPEED | |
| | 68ms for LCR-821/819/817/816, 34ms for LCR-829/827/826 |
| TEST SIGNAL LEVELS | |
| | 5mV ~ 1.275Vrms (5mV/step) for LCR-821/819/829/817/827 0.1V ~ 1.275Vrms (5mV/step) for LCR-816/826 |
| DC BIAS | |
| Internal | 2V |
| External | 0 ~ 35V for LCR-821; 0 ~ 30V for LCR-819/829/817/827/816/826 |
| DISPLAY RANGE | |
| Resistance | R 0.00001Ω ~ 99999kΩ |
| Capacitance | C 0.00001pF ~ 99999 μF |
| Inductance | L 0.00001mH ~ 99999H |
| Quality Factor | Q 0.0001 ~ 9999 |
| Dissipation Factor | D 0.0001 ~ 9999 Ω |
| Impedance | Z 0.00001Ω ~ 99999k for LCR-821 |
| Phase Angle (Degree) | θ -180.00° ~ 180.00° for LCR-821 |
| TEST MODE | |
| | R/Q , C/D, C/R, L/Q Z/θ, L/R for LCR-821 only |
| EQUIVALENT CIRCUIT | |
| | Parallel or Serial selectable |
| MEMORY | |
| | 100 memory blocks totally |
| AVERAGE | |
| | 1 to 255 times |
| TEST SPEED MODE | |
| | SLOW, MEDIUM and FAST |
| DISPLAY MODE | |
| | Value, Δ , Δ % |
| DISPLAY | |
| | 240x128 dot matrix C.C.F.L back light LCD |
| INTERFACE | |
| | Standard Interface : RS-232C for LCR-821 Standard Interface : Handler Interface for LCR-829/827/826 Optional : RS-232C Interface for LCR-819/817/816 (factory installed) (Including LCR-Viewer Software) |
| POWER SOURCE | |
| | AC 100V ~ 240V , 50/60Hz |
| DIMENSIONS & WEIGHT | |
| | 330 (W) x 149 (H) x 437 (D)mm, Approx. 5.5kg |



LCR-819

Rear Panel



| LCR-800 SERIES SELECTION GUIDE | | | | | | | |
|--------------------------------|--|----------------------------|---------|---------------------------|---------|---------------------------|---------|
| MODEL | LCR-821 | LCR-819 | LCR-829 | LCR-817 | LCR-827 | LCR-816 | LCR-826 |
| Display | 240 x 128 dot matrix CCFL back light LCD | | | | | | |
| Test Frequency | 12Hz~200kHz (504 steps) | 12Hz~100kHz (503 steps) | | 12Hz~10kHz (489 steps) | | 100Hz~2kHz (245 steps) | |
| Basic Accuracy | 0.05% | 0.05% | 0.1% | 0.05% | 0.1% | 0.1% | |
| Test Mode | R/Q, C/D, C/R L/Q, Z/θ, L/R | R/Q, C/D, C/R, L/Q | | R/Q, C/D, C/R, L/Q | | R/Q, C/D, C/R, L/Q | |
| Memory | 100 memory blocks totally | | | | | | |
| DC BIAS | Internal | 2V | 2V | 2V | 2V | 2V | 2V |
| | External | 0~35V | 0~30V | 0~30V | 0~30V | 0~30V | 0~30V |
| Interface | RS-232 | Std. | Opt. | | Opt. | | Opt. |
| | Handler | | | Std. | | Std. | Std. |

ORDERING INFORMATION

- LCR-821 200kHz High Precision LCR Meter
- LCR-819 100kHz High Precision LCR Meter
- LCR-829 100kHz High Precision LCR Meter with Handler Interface
- LCR-817 10kHz High Precision LCR Meter
- LCR-827 10kHz High Precision LCR Meter with Handler Interface
- LCR-816 2kHz High Precision LCR Meter
- LCR-826 2kHz High Precision LCR Meter with Handler Interface

ACCESSORIES :
User manual x 1, Power cord x1, LCR-06A x 1

Optional Accessories

- LCR-05 Test Fixture for Axial & Radial Leaded Components
- LCR-06A Kelvin Clip Test Leads
- LCR-07 Test Fixture, Two-Wire with Alligator Clips
- LCR-08 Test Fixture(Tweezers) for SMD/Chip Components
- LCR-09 Test Fixture for SMD/Chip Components
- LCR-13 Test Fixture for SMD/Chip Components
- GRA-402 Rack Adapter Panel, Rack Mounting (19", 4U)
- GTL-232 RS232C Cable, 9-pin Female to 9-pin, null Modem for Computer
- GTC-001 Instrument Cart
- GTC-002 Instrument Cart

LCR-06A



Description:
Kelvin clip test leads.
Frequency: DC to 1MHz
Max. Voltage: +/- 35V

LCR-05

Patent:185538



Description:
Test fixture for measurement of both axial and vertical lead components
Frequency: DC to 1MHz
Max. Voltage: +/- 35V

LCR-07



Description:
Test leads for conventional component measurement. It is especially useful for high impedance measurement. (With alligator clips)
Two-wire measurement; apply to low C or high R.
Frequency: DC to 1MHz
Max. Voltage: +/- 35V

LCR-08

Patent:188540



Description:
SMD / clip tweezers
Frequency: DC to 1MHz
Max. Voltage: +/- 35V

LCR-09

Patent:186171



Description:
SMD / chip test fixture
Frequency: DC to 1MHz
Max. Voltage: +/- 35V
Size range from 0603 to 1812

LCR-13

Patent:186171



Description:
SMD / chip test fixture
Frequency: DC to 1MHz
Max. Voltage: +/- 35V
Size range from 0201 to 0805